

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Norman Soloway, Reg. No. 24,315 on 5 November 2008, and by confirming voice mail message on 6 November 2008.

The application has been amended as follows:

Claim 1 is amended to read:

**An electrical characteristics measurement method, wherein a probe comprising a single signal terminal, at least one ground terminal, and a variable impedance element disposed in the vicinity of and in electrical communication with a terminal selected from said signal terminal and said ground terminal is used to measure the electrical characteristics of a measurement object, said method comprising the steps of:**

**setting the impedance of said variable impedance element substantially to 0 Ohms ( $\Omega$ ), disconnecting the signal terminal and ground terminal of the probe at the distal end of said probe, forming a short circuit, and connecting a load to perform calibrations;**

**making the impedance of said variable impedance element to be greater than a prescribed value, and placing said signal terminal and said ground terminal in contact with said measurement object to measure the electrical characteristics thereof; and**

**spacing said variable impedance element and a distal end of said signal terminal or said ground terminal within approximately 1/10 the measuring wavelength when the electrical characteristics of said measurement object are measured.**

Claim 9 is cancelled.

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2. The following is an examiner's statement of reasons for allowance:

Chheda et al. (US Patent 6,970,001 B2) discloses a variable impedance test probe including a first signal conductor, a first ground reference, and a first dielectric element disposed between the first signal conductor and the first ground reference conductor.

The dielectric element is configured to vary an impedance of the first signal conductor relative to the ground reference.

Inoue et al. (US Patent 6,617,864 B2) discloses a high frequency probe for examining electric characteristics of devices, in which a probe impedance is adjusted or matched to the characteristic impedance of the object to be measured by mounting a chip capacitor at specified positions in the probe body.

Matsunaga et al. (US Patent 6,242,930 B1) discloses a high frequency probe capable of adjusting characteristic impedance in end part and having the end part detachable, in which characteristic impedance of the probe part is varied by providing an elastically shaped part for securing contact pressure and using a pipe or the ground plane in an exposed part of the coaxial inner conductor to adjust a gap.

However, as to claim 1, the prior art of record fails to teach or suggest, singly or in combination, an electrical characteristics measurement method, wherein a probe comprising a single signal terminal, at least one ground terminal, and a variable impedance element disposed in the vicinity of and in electrical communication with a terminal selected from said signal terminal and said ground terminal is used to measure the electrical characteristics of a measurement object, including:

**Spacing said variable impedance element and a distal end of said signal terminal or said ground terminal within approximately 1/10 the measuring**

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**wavelength when the electrical characteristics of said measurement object are measured.**

in combination with the other limitations of the instant claim.

Dependent claims 2 – 3 and 7, definite and enabled by the specification, are also allowed due to their dependence on independent claim 1.

As to claim 5, the prior art of record fails to teach or suggest, singly or in combination, an electrical characteristics measurement device for measuring the electrical characteristics of a measurement object, including:

**The distance between said variable impedance element and the distal end of said signal terminal or said ground terminal as one of the terminals provided with said variable impedance element is within approximately 1/10 the measuring wavelength when the electrical characteristics of said measurement object are measured.**

in combination with the other limitations of the instant claim.

Dependent claims 6 and 8, definite and enabled by the specification, are also allowed due to their dependence on independent claim 5.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin M. Baldrige whose telephone number is 571 270 1476. The examiner can normally be reached on Monday through Friday 7:30AM to 5:00PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571 272 2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin M Baldrige/  
Examiner, Art Unit 2831

/Timothy J. Dole/  
Primary Examiner, Art Unit 2831